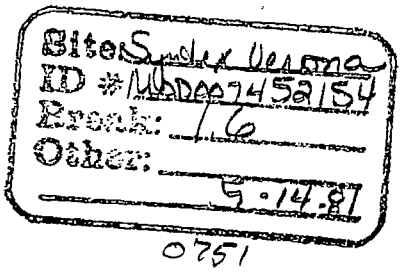
UNIT STATES ENVIRONMENTAL PROTECTI AGENCY

May 14, 1981

Overview of Syntex Remedial Work at the Denney Farm Site




Daniel J. Harris
On-Scene Coordinator, SVAN/EP&R

See Addressees

## I. Introduction

Pursuant to the Consent Decree and the Syntex Denney Farm Site plan as amended and approved, EPA shall have an overview function at the site in the person of an On-Scene Coordinator (OSC). This on-site overview shall coincide with the actual excavation of the trench contents, the repackaging of the contents, and the accumulation of these materials on-site, in a temporary drum storage building. This activity is scheduled to begin June 15, 1981 and is estimated to require 60 days to complete (target date August 13). It is the purpose of this memorandum to outline the duties and activities of the OSC during this time period.

## II. Overall Duties

The general overall responsibilities of the OSC in order of priority are as follows:

A. To provide on-scene evaluation of any incidents which may threaten the public health or environment, and to initiate an appropriate response to an incident as specified by the project contingency plan.

B. On a real time basis, to make such observations and measurements as to the nature and quantities of materials recovered and stored on site, and to assimulate analytical data as it becomes available, with the objective of keeping a current assessment of site risks, and the impact upon the project contingency plan.

C. To order the project shut down in the event that the public health or environment is threatened.

D. To see that the Syntex plan is carried out as specified by the plan, and to approve on-site, any departures or modifications of that plan.

E. Through visual observations, photographs and split sampling provide EPA with an independent record for the evaluation of a subsequent plan to be submitted by Syntex for the ultimate disposition of the contents of the trench.

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SUPERFUND RECORDS

CONCURRENCES

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SYMBOL | | | | | | | | |
| SURNAME | | | | | | | | |
| DATE | 5/19/81 | 5/19/81 | 5-19 | | | | | |

EPA Form 1320-1 (12-70)

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F. To serve as a liaison between Syntex and the agency, and other concerned state or federal entities for channeling and communicating such information as may be necessary.

G. To make daily progress reports to the Chief, Emergency Planning and Response Branch, for subsequent dispersement within the agency.

## III. Specific Tasks

### A. Administrative

The on-site duties of the OSC are predominately administrative in nature, and as foreseen, will require an accurate running log of the progress of work nature of materials recovered, etc. Once Syntex has sampled each drum, and following probable laboratory feasibility studies, they intended to categorize the waste by type and to submit a subsequent plan to EPA for the ultimate disposition of each waste category. An exception to this procedure would be the removal of materials recovered, which are found to be free of dioxin and which, by long-term storage on-site, may increase the overall risk of the project. An example of these materials would be flammable waste solvents.

It is essential that EPA develop an independent information and data base in order to evaluate the subsequent plan to be submitted by Syntex, and to insure that materials removed from the site are properly handled and disposed of. This record will be compiled from a combination of recorded observations, photographs, and split sample analysis.

### Work Log

#### a. Drum Contents

As per the plan, the trench drums will be opened, sampled, and transferred to new bung-top drums for storage on-site. Based upon experience with the Syntex destruct process and the Denney site investigation as well, it is known that high dioxin contaminated wastes are black, oily and sludge like. Other drums sampled in the trench contained wastes of different characteristics with trace quantities of dioxin (ppb range). It is anticipated that as the drums are exposed and sampled, the visual observations of waste characteristics will be consistent with subsequent resulting analytical data. In order to minimize unnecessary exposure to laboratory personnel, duplication of effort, and spread of contaminants via sample collection containers, lab glassware, etc., EPA will only obtain split samples on those drum wastes which are judged, on-scene, not to contain high levels of dioxin. If any discrepancy arises between the Syntex analytical data and EPA field observations, we can, at that time, return to the site and sample those specific drums in question. In reference to those drums containing appreciable concentrations of dioxin, it is not anticipated that hypothetical variations in analytical laboratory results (Syntex versus EPA data) will have any impact upon the decision process for the ultimate disposition of these materials.

With the proceeding rationale in mind, it is important that the work site log be accurate and comprehensive. As a minimum, the record for each drum of waste (est. 143 drums) must include the following :

1. Visual observation
   a. color
   b. liquid, solid, sludge, granular, etc.
   c. viscosity, thick-thin, etc.
   d. volume, estimate gallons, full or fractional drum, etc.

2. Identification
   a. Syntex lab number
   b. EPA Lab number if applicable
   c. Date and time of collection
   d. Photograph of sample (35 mm color slide)*

3. Condition of Drum
   a. crushed
   b. leaking
   c. identification of drum overpack

b. Miscellaneous Log Entries

Other miscellaneous log items which must be noted include the following:

1. Work progress.

2. Number of drums of highly contaminated soil moved to drum storage building.

3. Names, dates, times and purpose of site visitors brought in by the OSC.

4. Log of all photographs taken to include film roll number, camera frame number, subject, date, time and photographer.

B. Sampling

Sample target elements inherent or generated as a result of project activities include the following:

1. Waste contained in drums.

2. Visually contaminated soil.

3. Not visually contaminated soil.

4. Decon water.

5. Air particulate samples.

6. Miscellaneous trash

7. Contaminated rinse solvents

8. Clean Trench Faces

Expansion of each of these potential sample elements is provided as follows, along with an estimate of the number of samples to be collected is discussed as follows :

1. Drum Waste

The site is estimated to contain 143 drums, four drums are known not to contain still bottoms. Consequently, at most, the site contains potentially 139 drums of waste other than still bottoms. The OSC will obtain splits of all drum wastes to judge not to be still bottoms. EPA will provide sample containers and have Syntex collect the sample under our observation. Samples will be analyzed on a selective basis using a scheme to be developed at a later date.

2. Visually Contaminated Soil

Visually contaminated soil will be shoveled into drums and stored on-site pending analysis, and laboratory testing for the treatment and/or destruction and disposal of this material. As presently foreseen, we will make up, on site, a single composite sample of this soil for EPA laboratory analysis.

3. Not Visually Contaminated Soil

All not visually contaminated disturbed soil in the trench is to be placed in two microbiological degradation basins (MDB's) for long term treatment. After all disturbed soil is removed, an extra six inches of soil will be removed from each of the five trench faces. This soil will also be placed in the MDB's. Following completion of work, we will collect one composite sample from each basin for EPA Laboratory analysis.

4. Decon Water

Syntex will generate, wash, and rinse water on site from the decontamination of personnel and equipment. The fate of this water is uncertain at this time, and there is a possibility that it will be consumed onsite in the operation of the MDB's. It is probable that materials such as nutrients and water will have to be added to the MDB's to achieve optimum biological performance. Regardless, at this time, no determination can be made as to the number of samples necessary.

5. Air Particulate Sampling

Syntex will have four particulate samplers (one on each side of the fence) to monitor for dioxin contaminated soil particles. For purposes of estimation,

we will request approximately six splits of these at random times for analysis by the Regional Laboratory.

6. Trash

At this time, it is not envisaged that EPA will collect any samples of contaminated trash generated on site.

7. Contaminated Solvents

Pending upon Syntex's proposal for handling contaminated solvents, EPA may or may not collect samples.

8. Clean Trench Faces

Once the five fresh trench soil faces are exposed, the trench will be divided into five subunits of approximately equal area. A composite sample, each consisting of 12 individual samples, will be made up from each of the five areas. Each of the composites is to be analyzed for dioxin and other priority pollutants.

9. Summary of Sampling and Analytical Requirements

For scheduling and purposes of allotment of laboratory resources, the following summary is offered. This summary assumes a "worst case" condition for each sample target element. Every effort will be made to minimize the laboratory analytical workload through careful selection of samples and grouping of samples for composite analysis. It is not intended that all samples collected will be analyzed, however, the optimum analytical scheme cannot be determined until the samples are obtained. Samples will be delivered to the regional laboratory on a weekly basis.

a. Drum waste

Number of Samples est. 139

Number of Analyses est. 20

Analysis: Dioxin and general scan for principal constituents.

Containers:
For liquids 28 ml vials
For solids 1 pt. jars

b. Vidually contaminate soil

Number of Samples est. 3

Number of Analyses est. 3

Analysis: Dioxin and priority pollutants

Containers: 1 pt. jars.

c. Not visually contaminate soil

| | |
|---|---|
| Number of Samples | est. 2 |
| Number of Analyses | est. 2 |

Analysis: Dioxin

Containers: 1 pt. jar

d. Decon water

| | |
|---|---|
| Number of Samples | est. 1 |
| Number of Analysis | est. 1 |

Containers: 1 pt. glass jars

e. Air particulate samples

| | |
|---|---|
| Number of Samples | est. 6 |
| Number of Analysis | est. 6 |

Analysis: Dioxin

Containers: To be determined.

f. Trash

No estimate possible at this time.

g. Contaminated solvents

No estimate possible at this time.

h. Clean trench faces

| | |
|---|---|
| Number of Samples | est. 5 |
| Number of Analysis | est. 5 |

Analysis: High resolution dioxin and analysis plus priority pollutants.

## IV. Summary of Site Activities

As specified in the plan, the OSC has the authority to move freely about the site for the purposes of monitoring work progress, compliance with the plan work elements, and for collecting samples. Although the vast bulk of the work is of an administrative nature, it is anticipated that a significant portion of it will take place inside the fence, which will be expanded to encompass the buildings. By definition, activities inside the fence

are hazardous and will require protective gear. It is not anticipated that EPA will physically collect or assist in collecting drum samples; however, in order to vouch for sample integrity and chain-of-custody, it will be necessary to observe the sample in the process of being collected. This observation will necessitate being inside the work site protective structure.

V. Syntex Laboratory Inspections

Early on in the project and after Syntex has started analyzing samples, we shall arrange for an inspection, by Regional Laboratory personnel, of the Syntex laboratories in Springfield and Verona for the purpose of checking analytical procedures.

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Bob Kleopfer, SVAN/LABO
Bill Pedicino, WATR/WTRS
Charles Hensley, SVAN/LABO
Paul Walker, SVAN
Dan Harris, SVAN/EP&R

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DATE: May 14, 1981

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